

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera/

MIAMI-DADE COUNTY

Pella Corporation 102 Main Street Pella, IA 50219

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "HIG Fixed Casement" Aluminum Clad Wood Fixed Window - L.M.I

APPROVAL DOCUMENT: Drawing No. 1519, titled "HIG Aluminum Clad Impact Fixed Casement Window", sheets 1 through 6 of 6, dated 03/23/07, with revision B1 dated 10/21/11, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 09-1027.06 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMI-DADE COUNTY
APPROVED

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NOA No. 11-1026.12 Expiration Date: November 08, 2012 Approval Date: January 12, 2012 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. 1519, titled "HIG Aluminum Clad Impact Fixed Casement Window", sheets 1 through 6 of 6, dated 03/23/07, with revision B1 dated 10/21/11, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94

along with marked-up drawings and installation diagram of series HIG aluminum clad wood casement window, prepared by Architectural Testing, Inc., Test Report No. **ATI-93260.01-201-18**, dated 09/15/09, signed and sealed by Joseph A. Reed, P.E. (Submitted under previous NOA# 09-1027.06)

- 2. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
 - 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of three series/model HIG IG aluminum clad wood casement/fixed windows, prepared by Architectural Testing, Inc., Test Report No. **ATI-93328.01-201-18**, dated 08/24/09, with revision 1 dated 10/12/09, all signed and sealed by Joseph A. Reed, P.E.

(Submitted under previous NOA# 09-1027.06)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of series/model HIG IG/monolithic aluminum clad wood casement window mulled jamb to jamb to an aluminum clad wood fixed window, prepared by Architectural Testing, Inc., Test Report No. **ATI-71262.08-201-18**, dated 05/27/07, signed and sealed by Joseph A. Reed, P.E.

(Submitted under previous NOA# 07-0619.13)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 11-1026.12

Expiration Date: November 08, 2012 Approval Date: January 12, 2012

Pella Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS:

- 1. Anchor verification calculations and structural analysis, complying with FBC-2007 and FBC-2010, dated 09/08/09 and updated on 10/21/11, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
- 2. Glazing complies with ASTM E1300-04

D. OUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 11–0413.04 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont SentryGlas® Interlayer" dated 08/25/11, expiring on 01/14/17.
- 2. Notice of Acceptance No. 11–0624.01 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite® PVB Interlayer" dated 09/08/11, expiring on 12/11/16.

F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-2007 and FBC-2010, dated 10/21/11, signed and sealed by Warren W. Schaefer, P.E.
- 2. Statement letter of no financial interest, dated 10/19/11, signed and sealed by Warren W. Schaefer, P.E.
- 3. Laboratory compliance letters for Test Report No. ATI-93260.01-201-18, ATI-93328.01-201-18 and ATI-71262.08-201-18, issued by Architectural Testing, Inc., dated September 15, 2009 and August 25, 2009, signed and sealed by Joseph A. Reed, P.E.

G. OTHERS

1. Notice of Acceptance No. **09-1027.06**, issued to Pella Corporation for their Series "Impact Resistant" Aluminum Clad Wood Fixed Casement Window – L.M.I., approved on 01/06/10 and expiring on 11/08/12.

Manuel Perez, P.E. Product Control Examiner NOA No. 11-1026.12

Expiration Date: November 08, 2012 Approval Date: January 12, 2012

GENERAL NOTES:

THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE

"ALLOWABLE DESIGN PRESSURE TABLE(S). 2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE

STRUCTURE 3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCALS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT WINDOWS.

5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE

(FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ). IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.

ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.

8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF Kd = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD

9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR WOOD SCREW ANALYSIS ONLY.

10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.

11. ALL WOOD MEMBERS OF WINDOWS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.

CORNER CONSTRUCTION

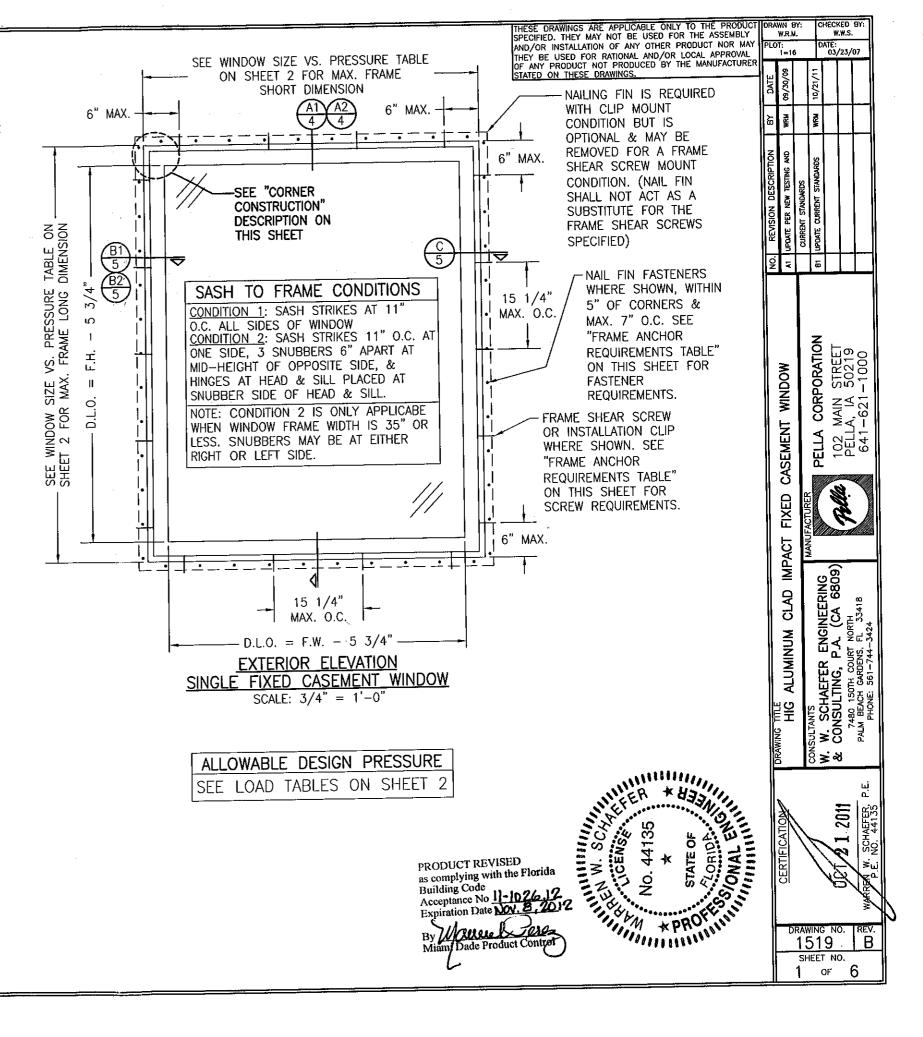
FRAME CORNERS: THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH THREE(3) 14 GAGE 7/16" X 2 1/2" STAPLES. CLADDING IS MITERED TOGETHER, JOINED WITH A PLASTIC CORNER KEY PART NO. 77U00000 & SEALED WITH BUTYL DEVAN 578.12 OR BOSTIK 900 POLYURETHANE SEALANT. EACH CLADDING MEMBER IS SECURED TO THE KEY WITH 1 NO. 10 X 17/32" FH SCREW (2 TOTAL PER CORNER) SASH CORNERS:

OPTION 1; MORTISE & TENON CONSTRUCTION. A 1/8" BEAD OF BOSTIK CHEM-CALK URETHANE IS PLACED AT THE TENNON BOTTOM SURFACE. WOOD GLUE IS PLACED AT THE TENNON SIDES. THE JOINT IS THEN ASSEMBLED & SECURED WITH ONE 15 GA. X 1 1/2" FINISH NAIL.

OPTION 2: SCREWED CONSTRUCTION. MEMBER ENDS ARE PROFILED AND PARTIALLY TENONED, BUTTED & ADHERED TOGETHER WITH BOSTIC 70-05/70-05A AND THEN SECURED WITH NO. 12 X 4" FH WOOD SCREWS (1 SCREW WITH SASH HEIGHTS LESS THAN 3.5"; 2 SCREWS WITH SASH HEIGHTS 3.5" TO 5 3/8"). THE CLADDING IS TABBED WITH THE TABS MEETING IN A BED OF BOSTIC IN A GROOVE ON THE EXTERIOR SASH FACE RESULTING FROM THE PARTIALLY TENNONED RAIL

SASH CORNER OPTION 2 WINDOWS ARE LIMITED TO MAXIMUM $\pm/-60$ PSF DESIGN PRESSURE (SEE PRESSURE NOTE ON SHEET 2)

FRAME ANCHOR REQUIREMENTS TABLE							
OPENING TYPE (SUBSTRATE)	FRAME/CLIP/NAIL FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.				
FRAME SHEAR SCREWS							
2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"				
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"				
MIN. 1/8" THK A36 STEEL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"				
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"				
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"				
INSTALLATION CLIP							
2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"				
MIN. 1/8" THK A36 STEEL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"				
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"				
NAILING FIN							
2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"				
2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	2" X 11 GA. ROOFING NAIL	1 7/8"	1/2"				
MIN. 1/8" THK A36 STEEL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"				
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"				
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).							



ALLOWABLE WINDOW SIZE VS. PRESSURE TABLE (SEE PRESSURE NOTE BELOW TABLE) (SINGLE WINDOWS)															
MAXIMUM MAXIMUM ALLOWABLE PRESSURE (PS							MAXIMUM	ALLOWABLE PRESSURE (PSF)							
FRAME LONG		GLASS OPTION						FRAME SHORT			GLASS	OPTION			
DIMENSION		Α δ	k С	B & D E		E	DIMENSION	DIMENSION	A & C		B & D		E		
(IN.)		POS.	NEG.	POS.	NEG.	POS.	NEG.	(IN.)	(IN.)	POS.	NEG.	POS.	NEG.	POS.	NEG.
144	29		_	75.0	75.0	_		73	59	_	_	75.0	75.0		-
	26	_	l –	75.0	85.0				52	_	_	75.0	81.8		
	17	75.0	75.0	75.0	85.0		_		48	_	-	75.0	85.0	_	
	32	_	_	75.0	75.0	_			35	75.0	75.0	75.0	85.0		
	29		_	75.0	85.0	_	_		31	75.0	75.0	75.0	85.0	(*)65.5	(*)65.5
132	19	75.0	75.0	75.0	85.0	_	_		29	75.0	75.0	75.0	85.0	(*)71.3	(*)71.3
	17	75.0	75.0	75.0	85.0	_	-		25	75.0	75.0	75.0	85.0	75.0	75.0
	35	_	-	75.0	75.0		_		60	_	-	75.0	75.0		
120	32	-	_	75.0	84.9	-	_		54	_	-	75.0	81.8		
120	21	75.0	75.0	75.0	85.0	_	_	71	49	_	_	75.0	85.0		
	19	75.0	75.0	75.0	85.0	74.8	74.8		35	75.0	75.0	75.0	85.0	-	
	39		_	75.0	75.0	_	-		32	75.0	75.0	75.0	85.0	(*)64.8	(*)64.8
100	35	_	_	75.0	85.0	-	_		29	75.0	75.0	75.0	85.0	(*)73.4	(*)73.4
108	23	75.0	75.0	75.0	85.0		_		25	75.0	75.0	75.0	85.0	75.0	75.0
	21	75.0	75.0	75.0	85.0	75.0	75.0	65	65			75.0	75.0		<u> </u>
	44	_	_	75.0	75.0	_			59			75.0	85.0		
96	39		-	75.0	85.0	_	-		39	73.1	73.1	75.0	85.0		
96	26	75.0	75.0	75.0	85.0	-	_		35	75.0	75.0	75.0	85.0	(*)69.6	(*)69.6
	23	75.0	75.0	75.0	85.0	75.0	75.0		32	75.0	75.0	75.0	85.0	(*)73.7	(*)73.7
	50			75.0	75.0	-			29	75.0	75.0	75.0	85.0	75.0	75.0
	45	_	_	75.0	83.1	-		59	59			75.0	85.0		
0.4	41	-	_	75.0	85.0	_			43	73.0	73.0	75.0	85.0		
84	30	75.0	75.0	75.0	85.0	_			38	74.6	74.6	75.0	85.0	(*)73.2	(*)73.2
	27	75.0	75.0	75.0	85.0	(*)72.5	(*)72.5		36	75.0	75.0	75.0	85.0	75.0	75.0
	26	75.0	75.0	75.0	85.0	75.0	75.0		53	<u> </u>		75.0	85.0	75.0	75.0
79	53		_	74.9	74.9	_	_	53	48	75.0	75.0	75.0	85.0	75.0	75.0
	48		_	75.0	82.0	_	_		42	75.0	75.0	75.0	85.0	75.0	75.0
	32	75.0	75.0	75.0	85.0	_		47	47	75.0	75.0	75.0	85.0	75.0	75.0
	28	75.0	75.0	75.0	85.0	(*)71.3	(*)71.3	NOTES:						_	

1. SEE GLAZING DETAILS ON SHEET 4 FOR GLASS OPTIONS.
2. IF NO PRESSURE IS SHOWN, THE SIZE SPECIFIED IS NOT ACCEPTABLE FOR THAT GLASS OPTION.

3. IF WINDOWS ARE MULLED TOGETHER, THE LESSER OF THE PRESSURE SPECIFIED IN THIS TABLE FOR THE INDIVIDUAL WINDOW(S) AND THAT SPECIFIED IN THE MULLION TABLE SHALL CONTROL FOR THE OVERALL

(*) WHEN GLASS TYPE "E" USES 1/8" TEMPERED GLASS FOR THE EXTERIOR PANE OF GLASS IN LIEU OF 1/8" ANNEALED, THE ALLOWABLE PRESSURE ON THE WINDOW MAY BE INCREASED TO +/-75 PSF.

ALLOWABLE PRESSURE NOTE:

75.0 75.0 75.0

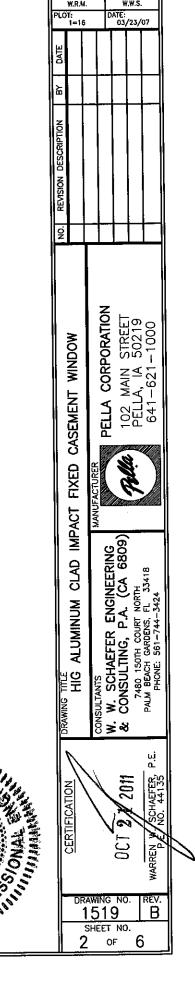
85.0

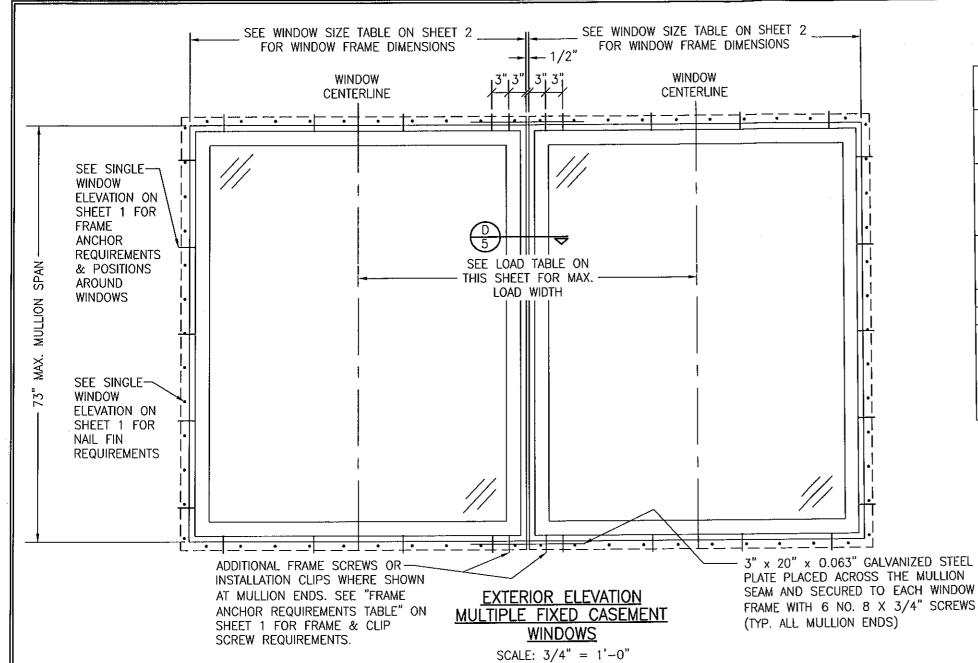
75.0

75.0

PRESSURES LISTED IN TABLE CONSIDER WINDOWS WITH SASH CORNER CONSTRUCTION OPTION 1. WHEN SASH CORNER CONSTRUCTION OPTION 2 IS USED, ALLOWABLE PRESSURE MAY NOT EXCEED $\pm 1/-60$ PSF REGARDLESS OF PRESSURES SHOWN IN TABLE.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 11-1076-12 Expiration Date Nov. 8, 2012





	→7	00.0	,						
73	47.5	75.0	82.5						
		41.5	75.0	85.0					
		59.5	75.0	78.6					
	71	53.5	75.0	81.5					
		47.5	75.0	85.0					
	65	65.5	75.0	85.0					
	59	59.5 & GREATER	75.0	85.0					
	NOTES: 1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES. 2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.								

MAXIMUM

MULLION SPAN

(IN.)

ALLOWABLE DESIGN PRESSURE TABLE

MAXIMUM

LOAD WIDTH

(IN.)

59.5

53.5

(SIDE BY SIDE WINDOWS)

ALLOWABLE PRESSURE

(PSF)

POSITIVE

75.0

75.0

NEGATIVE

75.0

78.0

CORPORATION CASEMENT WINDOW

ATE: 03/23/07

IMPACT CLAD ALUMINUM

В

6

Acceptance No II-1076.17 A PROPERTY OF PRO

MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.

2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING WINDOW SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.

3. IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE UNDO FAILURE.

4. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERED FROM THE WINDOWS & THEIR MULLIONS.

5. INDIVIDUAL WINDOW SIZES SHALL BE AS SPECIFIED IN THE SINGLE WINDOW ELEVATION.

